From: Scott Shuford

Sent: Monday, May 07, 2007 5:44 PM

To: 'freeborn@freebornasheville.com'; Mayor Terry Bellamy; 'Brownie Newman'; 'Bryan Freeborn'; 'Dr Mumpower'; 'Holly Jones'; 'Jan Davis'; 'Robin Cape'; Mayor Terry Bellamy

Cc: Gary Jackson; Jeff Richardson; Bob Oast; Lauren Bradley; Shannon Tuch; Alan Glines; Blake

Esselstyn; Keisha Lipe

Subject: Answers to Councilmember Cape's questions on steep slopes

Mayor Bellamy and City Council Members:

Here are Ms. Cape's questions and staff responses in highlights.

Scott Shuford, AICP - Director, Planning and Development Department

In going over the steep slope information again yesterday a few new questions and comments popped up. I am hopeful we can have some of this information for Tuesday's meeting.

1) please give us a copy of the "official city of Asheville Ridgetops Map

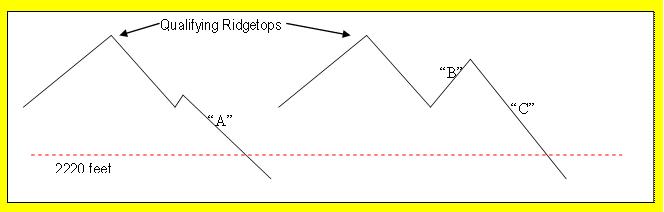
The "official" maps are paper and can't easily be disseminated but I've attached a jpg-file that illustrates the designated ridgetops. After you open the attachment, you will need to zoom in to see the specific ridgetops.

2) It seems that section 7.12.3 already defines clearly what the protected ridges are within the city of Asheville "all mountain ridges whose elevation is 500 or more feet above the elevation of an adjacent valley floor." Could this not be used as the basis for establishing where the altitude measurements begin. For example we could map these ridges as defined in the UDO and if your property is above 2220 on those ridges the rules apply.

See below for Blake Esselstyn's assessment of this concept. It appears that calculating the area would be quite complicated and provide little benefit over the current proposal that factors elevation and slope. The current staff proposal uses the "hillside" parameters that have worked pretty well for 30 years.

{Blake states:} About question 2: This approach (if I'm understanding Ms. Cape's proposal correctly) is not easy to evaluate without bringing up some questions. One challenging element is how to interpret her statement "property ... on those ridges." That said,

- Most of the currently qualifying hillside areas can be generally associated with the identified qualifying ridges already. There are a few small exceptions (e.g. Kimberly Knoll, some areas off Overlook Road in South Asheville, areas southwest of Richmond Hill and Crest Mountain).
- It's not as straightforward as it might sound to determine if an area is downhill from one ridge as opposed to another. I'll insert a diagram here.



Intuitively, most folks would probably say that point "A" is on the face underneath a qualifying ridgetop. But what about point "C"? Is it on the face of a secondary ridge? If so, how do you define what constitutes a secondary ridge? What about "B"? Reasonable folks would disagree about what's on a slope under a given ridge. - Though it may seem simple, just identifying the areas within 100 vertical feet of the protected ridgetops has been labor-intensive, and requires a lot of computation, processing, and inspection. - Identifying the 2220' contours that have a protected ridge on the land above them, and only considering the areas above these 2220 contours could be easily done, but the results would yield areas overwhelmingly similar to the existing areas, assuming slope is still factored in (see next point). - It's not clear whether the proposal is that this would be the only litmus test determining whether special regulations would apply ("if your property is above 2220 on those ridges the rules apply")--would slope not be considered as well? If this approach took slope out of the considerations, there would be numerous areas (e.g. lower Griffing Blvd.) that are pretty flat, but would qualify under this approach. - Summary: if slope is still taken into account, bringing the protected ridgetop lines into the identification of steep slope areas could potentially bring about small reductions in the amount of area that would qualify, but the process could be technically complicated and contentious.

3) in section F.2 of the proposed ordinance in Grading/road construction; Bob, I have some questions about whether we can take fee in lieu for use in general or must we use it specifically for the area itself? Can we utilize these funds for connective sidewalks, etc along main corridors most closely situated to the property or can we use it any where in the city. What are the perimeters of fee in lieu.

Bob Oast has addressed this in separate email correspondence.

4) per structure height. I do not support an additional 12" in height for LRV unless we also add provision for breaking up the roof massing, (say no more than 50% of the roof mass can go the additional height.

If that's the desire of Council, staff can make this happen.

4) please clarify the reference to the cross sections here, is this just across the slope or 50' width on the building any direction?

Across the slope.

5) is there a way to get away from the density dialogue and change it to a building size designation?

Density is governed by the underlying zoning, the percent of slope, and any bonuses. Please note that the density bonuses allow multifamily development to occur in single family zones up to 8 units per building. Ultimately, building size is governed by the extent of grading, more so than density. Grading, like density, is allowed based on steepness of slope. If Council wants to establish some maximum structure size in steep slope areas, there are a few things to keep in mind:

- ? The density bonus structures will be covered by this limitation, unless excepted.
- ? Nonresidential structures will also be covered by this limitation, unless excepted.
- ? There may be tax base considerations while there may be an interest in addressing the "McMansion" phenomenon through this ordinance, such limits may restrict tax base potential without any practical effect on affordability. Staff is comfortable with the structure size limits imposed by the structure width and height requirements, further moderated by the extent of grading requirements in addressing the structure size issue, but we're open to any alternative direction from Council.
- 6) Please show some examples of the 60% density accumulation.

Here is some information that may be of help. Most steep slope areas are zoned RS-2 which allows 2 units/acre (upa) on flat land. The ordinance specifies density limits that reduce density based on extent of slope. Here's how a 60% bonus would affect RS-2 zoned properties at 3 different slopes:

% slope	Density reduction	Density w/60% bonus
25%	0.7 upa	1.12 upa
35%	0.4 upa	0.64 upa
40%	0.1 upa	0.16 upa

The issue of whether a cumulative bonus of 60% is too generous is more a policy issue than a technical one.

7) or non residential density, please also show some examples.

See below. Because floor area ratio (FAR) is a relationship-based measure that establishes the size of the entire structure's gross floor area relative to the size of the lot on which it is placed, I have listed under intensity and bonus intensity the size structure that could be built on a 50,000 square foot lot (just over an acre). In general, I would suspect grading limits on slopes less than 35% to have a greater impact on floor area than FAR requirements.

% slope	Intensity allowance	Intensity w/60% bonus
25%	0.15 FAR	0.24 FAR
	7,500 sq ft	12,000 sq ft

35%	0.05 FAR 2,500 sq ft	0.08 FAR 4,000 sq ft
40%	0.01 FAR 500 sq ft	0.016 FAR 800 sq ft

This ordinance is especially difficult to read because of lay out. I would advise that page breaks happen along informational lines, not in mid columns or descriptions. this would allow more opportunity for illustrations of each idea and an easier read for all involved. I would be happy to show examples of this.

I'm not sure how the ordinance has been transmitted to you so I don't know if this suggestion would work – go to "View" on your toolbar and select "Web layout" to be able to read tables, etc. without the formatted page breaks. If you or any other Council member would like, I can print a hardcopy without formatted page breaks in order to achieve your objective – just let me know.

Other Questions by Councilmember Cape

Regulate by "Viewshed" Instead of by Elevation

The technical mapping part (taking at a 3D model and determining which areas are visible from certain points or lines) can be done. The simplest, most commonly used methodology does not take into account obstructions like trees or buildings. More sophisticated models can be utilized, given time.

The tricky part is the defining which viewpoints should be considered. Do you take 100 evenly spaced points around the Asheville jurisdiction and find what's visible from them? Or do you weight certain views as more important, e.g. from downtown or from major corridors or from residential neighborhoods, or from high altitudes or from Beaver Lake? Do you measure visibility from ground level or the equivalent of a second story window? The 100 random points route is the easiest, but could be perceived as too simplistic and may not get at the problem/issue in an effective fashion.

In any event, it would be time-consuming to prepare a model most foks would agree on, but it could be done.

Provide Examples of Retaining Wall Landscaping

Due to technical and cost issues, the tallest retaining walls likely to be constructed are about 40 feet in height. The examples below illustrate the two proposed options for landscaping (green screen and foreground) at maturity. The foreground landscaping option assumes that a large maturing tree will only reach 40 feet in height with about a 30 foot spread in a confined situation.

